

*42*

32. The system of claim 31, wherein the first switching device is operable to selectively couple the N-1 charge storage devices to the capacitive load during both the charging and the discharging of the capacitive load.

33. The system of claim 31, wherein each of the N-1 charge storage devices includes a capacitor.

*43*  
*Sub B3*

36. The system of claim 31, wherein the selective coupling of the N-1 charge storage devices to the capacitive load causes at least one of the charging and the discharging of the capacitive load to occur in the N steps.

*44*  
*Sub B4*

46. A method of charging and discharging a capacitive load in N steps, comprising the steps of:  
charging the capacitive load;  
discharging the capacitive load; and  
storing at least a portion of a charge discharged during the discharging step in N-1 charge storage devices for use in a subsequent charging step.

Please add the following new claims 47-72:

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*Sub B5*

47. A system for charging and discharging a capacitive load, comprising:  
a discharge switch to discharge the load;

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N-1 charge storage elements;

a switch assembly including N-1 switches to respectively couple the N-1 charge storage elements to the load to charge or discharge the load; and

an Nth switch to couple the load to a power supply voltage.

48. The system of claim 47 wherein N is an integer having a value of at least 2.

49. The system of claim 47 wherein N=2.

50. The system of claim 47 wherein first leads of each of said N-1 charge storage elements are connected together and wherein second leads of each of said N-1 charge storage elements are connected to respective ones of said N-1 switches.

51. A system for charging and discharging a capacitive load, comprising:

a discharge switch to discharge the load;

N-1 charge storage elements;

a switch assembly including N-1 switches to respectively couple the N-1 charge storage elements to the load to charge or discharge the load in N-1 steps; and

an Nth switch to couple the load to a power supply voltage.

52. A system for charging and discharging a capacitive load, comprising:

a discharge switch to discharge the load;

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N-1 charge storage elements;

a switch assembly including N-1 switches to respectively couple the N-1 charge storage elements to the load, said N-1 switches being closed and opened in succession for charging or discharging the load in N-1 steps; and

an Nth switch to couple the load to a power supply voltage.

53. A system for charging and discharging a capacitive load, comprising:

a discharge switch to discharge the load;

N-1 charge storage elements;

a switch assembly including N-1 switches to respectively couple the N-1 charge storage elements to the load for charging or discharging the load; and

an Nth switch to couple the load to a power supply voltage;

wherein first leads of each of said N-1 charge storage elements are connected together and wherein second leads of each of said N-1 charge storage elements are connected to respective ones of said N-1 switches.

54. A system for at least one of charging and discharging a capacitive load in N steps, comprising:

N-1 charge storage elements; and

a switch assembly to selectively couple the N-1 charge storage elements to the capacitive load.

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55. The system of claim 54, wherein the switch assembly includes N-1 switches, each coupled to a respective one of the N-1 charge storage elements.

56. The system of claim 54, further comprising a power supply switch to couple the capacitive load to a power supply.

57. The system of claim 54, further comprising a discharge switch to discharge the load capacitor.

58. The system of claim 54, wherein the switch assembly selectively couples the N-1 storage elements to the capacitive load one at a time.

59. The system of claim 54, wherein each of the charge storage elements comprises a capacitor.

60. The system of claim 54, wherein  $N \geq 2$ .

61. The system of claim 54, wherein  $N=2$ .

62. A system for at least one of charging and discharging a capacitive load, comprising:

a plurality of charge storage elements; and

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a switch assembly to selectively couple the charge storage elements to the capacitive load one at a time.

63. The system of claim 62, wherein the switch assembly includes a plurality of switches, each coupled to a respective one of the plurality of charge storage elements.

64. The system of claim 62, further comprising a power supply switch to couple the capacitive load to a power supply.

65. The system of claim 62, further comprising a discharge switch to discharge the load capacitor.

66. The system of claim 62, wherein each of the charge storage elements comprises a capacitor.

67. A system for at least one of charging and discharging a capacitive load, comprising:

a plurality of charge storage elements, each having a first lead and a second; and  
a plurality of switches to selectively couple the charge storage elements to the capacitive load,

wherein all of the first leads of the charge storage elements are connected together  
and wherein each of the second leads of the charge storage elements is connected to a respective

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one of the switches.

68. The system of claim 67, further comprising a power supply switch to couple the capacitive load to a power supply.

69. The system of claim 67, further comprising a discharge switch to discharge the load capacitor.

70. The system of claim 67, wherein each of the charge storage elements comprises a capacitor.

71. A system for at least one of charging and discharging a capacitive load in a plurality of steps, comprising:

a plurality of charge storage elements, each capable of storing an amount of charge corresponding to a voltage across the charge storage element; and

a plurality of switches to selectively couple the charge storage elements to the capacitive load,

wherein the voltages across the charge storage elements are self-stabilizing over a full charge/discharge cycle.

72. A system for at least one of charging and discharging a capacitive load, comprising:

*History*

a capacitor having a first end coupled to a first potential source and a second end;  
a first switch having a first end coupled to the second end of the capacitor and a  
second end coupled to the capacitive load;  
a second switch having a first end coupled to the first potential source and a  
second end coupled to the second end of the first switch and the capacitive load; and  
a third switch having a first end coupled to a second potential source and a second  
end coupled to the second end of the first switch, the second end of the second switch, and the  
capacitive load.

#### REMARKS

The Examiner in the Office Action dated January 25, 1999, objected to the reissue declaration and rejected claims 12-46 as being based upon a defective reissue declaration. The Examiner further rejected claims 12-46 under 35 U.S.C. 102(b) as being anticipated by *Masuda et al.* and under 35 U.S.C. 103(a) as being unpatentable over Fig. 2 of the above-identified application in view of *Masuda et al.* For the reasons set forth below, Applicants respectfully traverse the Examiner's objection and rejections.

As an initial matter, Applicants respectfully submit that the Office Action dated January 25, 1999 is incomplete. As set forth in 37 C.F.R. § 1.176, original patent claims re-presented in a reissue application, are "subject to reexamination, and the entire application will be examined in the same manner as original applications." See also *Manual of Patent Examining Procedure Section 1445*. However, in the January 25, 1999 Office Action, the Examiner only provided a disposition of newly present claims 12-46 and made no reference to